

DETAILED ACTION

Status of the Claims

This communication is in response to the Amendment filed on 01/06/2010.

Application No: 10/748981.

Claims 1-23 are pending.

Claims 21, 22 and 23 are new.

Allowable Subject Matter

1. Claims 7, 15, 22 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

2. An examiner's Response to the record appears below.

3. Applicant's arguments filed on 01/06/2010 have been considered but they are not persuasive and, therefore, the claim rejection is maintained.

Applicant argues that Haverinen (a) "has not been shown to teach or suggest at least comparing a current network identifier identifying a target network of a current connection of a terminal" and (b) "associated with the currently applied at least one connection setting to stored network identifiers associated with other available connection settings, as claimed in each of the independent claims". (c) "Haverinen has not been shown to teach or suggest using a network identifier currently in use (a current network identifier associated with a currently applied connection setting)". (d) "Haverinen has not been shown to teach or suggest roaming within the same network identifier as is currently in use by seeking another connection setting associated with the same network".

However, (a) Haverinen teaches comparing a current network identifier identifying a target network of a current connection of a terminal in [0042] (e.g. The mobile station performs PLMN selection on the basis of a comparison of the received PLMN identifiers PLMN ID and the PLMN identifiers stored in the USIM (possibly also in the memory M). [0038] PLMN identifiers PLMN ID are also determined in the USIM connected to the MS to be used in network selection).

(b) Haverinen teaches associated with the currently applied at least one connection setting to stored network identifiers associated with other available connection settings in [0038]

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(e.g. This data includes at least the identifiers (PLMN ID) of the PLMNs to which it is possible to connect from the local network BAN).

(c) Haverinen teaches a network identifier currently in use in [0048] (e.g. The MS transmits a response preferably comprising a network identifier NAI (I.e. current network identifier). The response is routed via the IP network IPNW typically by means of the AAA protocol to the AUTS, which acts as an EAP authentication server. The NAI comprises the IMSI obtained from the USIM, and the realm identifier of the authentication server AUTS of the roamed network PLMN obtained as described above). Therefore, Haverinen teaches selecting a connection setting associated with the same network identifier as is associated with the currently applied connection setting.

(d) Haverinen teaches roaming within the same network identifier as is currently in use by seeking another connection setting associated with the same network ([0004] (e.g. Roaming can also be arranged in a WLAN, i.e. a user can be authenticated in the local network where he is roaming (and with which he typically has no service contract made in advance) by means of the PLMN, a subscriber identification module (in the GSM a subscriber identity module SIM) provided by the home PLMN (HPLMN), and subscriber data located in the subscriber's home network. However, a mobile station can also be located for example abroad in the area of a local network with no direct connection to the subscriber's HPLMN but only to one or more networks of other PLMN operators)).

Therefore, one skilled in the art of communications would come to the conclusion that applicant's method for handover is anticipated by the methods of Haverinen. Applicant's arguments regarding independent claims are not persuasive and, therefore, the claims rejection is maintained.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 5-6, 8-10, 13-14, and 16-20 are rejected under 35 U.S.C.102 (e) as being anticipated by Haverinen et al. (U.S.Pub-20030119481).

Regarding claim 1, Haverinen teaches a method comprising:

storing in a terminal connection settings and network identifiers (fig.2:item 201, [0038] PLMN ID), wherein at least one network identifier of the stored network identifiers is associated with at least some of the alternative connection settings (table 1, [0038]-[0039] the PLMN list), the network identifier identifying a target network reachable by a connection from the terminal (table 1, [0038]-[0039] PLMN identifiers PLMN ID are also determined 201 in the USIM connected to the MS to be used in network selection),

comparing ([0006] comparison), in the terminal, the current network identifier identifying a target network of a current connection of the terminal and associated with the currently applied at least one connection setting to the stored network identifiers (PLMN ID stored in memory) associated with at least one other available connection settings ([0006] comparison of the received PLMN identifiers and PLMN identifiers stored in the terminal equipment, and [0042]),

selecting at least one connection setting associated with the same network identifier as the network identifier associated with the currently applied at least one connection setting ([0006] and [0042] The mobile station performs 203 PLMN selection on the basis of a comparison of the received PLMN identifiers PLMN ID and the PLMN identifiers stored in the USIM).

carrying out a handover related function to continue providing access to the target network (fig.2: item 204, [0043] set up a connection 204 between the MS and the network

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element) via a new access point by using the selected at least one connection setting ([0043] If the selected network PLMN cannot be used for some reason, the network selection 203 can be carried out again as described above either automatically or manually, and a connection 204 can be set up to another UMTS network PLMN).

Regarding claim 2, Haverinen teaches the method according to claim 1,

wherein the network identifiers of the other available connection setting are checked in response to a need to arrange handover for the original connection based on the currently applied at least one connection setting (see Haverinen, [0042] comparison of the received PLMN IDs and PLMN IDs stored in the USIM, [0058]).

Regarding claim 5, Haverinen teaches the method according to claim 1, wherein the network identifier associated with at least one connection setting selected by a handover algorithm is checked (see Haverinen, [0042] comparison of the received PLMN IDs and PLMN IDs stored in the USIM, [0058]), and

handover is carried out using the selected at least one connection setting if the network identifier is the same as the network identifier associated with the currently applied at least one connection setting (see Haverinen, [0006] and [0042] The mobile station performs 203 PLMN selection on the basis of a comparison of the received PLMN identifiers PLMN ID and the PLMN identifiers stored in the USIM), or

At least one new connection setting is selected (see Haverinen, [0043] if the selected network PLMN cannot be used for some reason, the network selection 203 can be carried out

again as described above either automatically or manually, and a connection 204 can be set up to another UMTS network PLMN).

Regarding claim 6, Haverinen teaches the method according to claim 1, wherein at least one network identifier is defined internally in the terminal (see Haverinen, fig.2: items 201 and 203) and associated with at least one connection setting (see Haverinen, fig.2: items 201 and 203: performing network selection in MS).

Regarding claim 8, Haverinen teaches the method according to claim 1, wherein the at least one available connection setting is determined based on information received from the network (see Haverinen, [0006] and [0042]).

Regarding claim 9, Haverinen teaches a wireless terminal comprising means for establishing access with a wireless network, wherein

memory including computer program code for storing in a terminal connection settings and network identifiers (fig.2:item 201, [0038] PLMN ID), wherein at least one network identifier of the stored network identifiers is associated with at least some of the alternative connection settings (table 1, [0038]-[0039] the PLMN list), the network identifier identifying a target network reachable by a connection from the terminal (table 1, [0038]-[0039] PLMN identifiers PLMN ID are also determined 201 in the USIM connected to the MS to be used in network selection),

at least one processor, the memory and the computer program code configured to, with the at least one processor, cause the terminal at least to compare ([0006] comparison), a current network identifier identifying a target network of a current connection of the terminal and

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associated with the currently applied at least one connection setting to the stored network identifiers (PLMN ID stored in memory) associated with at least one other available connection settings ([0006] comparison of the received PLMN identifiers and PLMN identifiers stored in the terminal equipment, and [0042]) to select at least one connection setting associated with the same network identifier as the network identifier associated with the currently applied at least one connection setting ([0006] and [0042] The mobile station performs 203 PLMN selection on the basis of a comparison of the received PLMN identifiers PLMN ID and the PLMN identifiers stored in the USIM), and

carry out a handover related function to continue providing access to the target network (fig.2: item 204, [0043] set up a connection 204 between the MS and the network element) via a new access point by using the selected at least one connection setting ([0043] If the selected network PLMN cannot be used for some reason, the network selection 203 can be carried out again as described above either automatically or manually, and a connection 204 can be set up to another UMTS network PLMN).

Regarding claim 10 is rejected with the same reasons set forth in claim 2.

Regarding claim 13 is rejected with the same reasons set forth in claim 5.

Regarding claim 14 is rejected with the same reasons set forth in claim 6.

Regarding claim 16 is rejected with the same reasons set forth in claim 8.

Regarding claim 17, Haverinen teaches a computer-readable medium, wherein said computer-readable medium comprises computer-executable instructions stored thereon for controlling a wireless terminal to:

store connection settings and network identifiers (fig.2:item 201, [0038] PLMN ID), wherein at least one network identifier of the stored network identifiers is associated with at least some of the alternative connection settings (table 1, [0038]-[0039] the PLMN list), the network identifier identifying a target network reachable by a connection from the terminal (table 1, [0038]-[0039] PLMN identifiers PLMN ID are also determined 201 in the USIM connected to the MS to be used in network selection),

compare ([0006] comparison) current network identifier identifying a target network of a current connection of the terminal and associated with the currently applied at least one connection setting to the stored network identifiers (PLMN ID stored in memory) associated with at least one other available connection settings ([0006] comparison of the received PLMN identifiers and PLMN identifiers stored in the terminal equipment, and [0042]),

select at least one connection setting associated with the same network identifier as the network identifier associated with the currently applied at least one connection setting ([0006] and [0042] The mobile station performs 203 PLMN selection on the basis of a comparison of the received PLMN identifiers PLMN ID and the PLMN identifiers stored in the USIM).

carrying out a handover related function to continue providing access to the target network (fig.2: item 204, [0043] set up a connection 204 between the MS and the network element) via a new access point by using the selected at least one connection setting ([0043] If

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the selected network PLMN cannot be used for some reason, the network selection 203 can be carried out again as described above either automatically or manually, and a connection 204 can be set up to another UMTS network PLMN).

Regarding claim 18 is rejected with the same reasons set forth in claim 2.

Regarding claim 19, Haverinen teaches a terminal comprising:

Means for establishing access with a wireless network (fig.2: item 201, [0038] PLMN ID),

means for storing in a terminal connection settings and network identifiers (fig.2:item 201, [0038] PLMN ID), wherein at least one network identifier of the stored network identifiers is associated with at least some of the alternative connection settings (table 1, [0038]-[0039] the PLMN list), the network identifier identifying a target network reachable by a connection from the terminal (table 1, [0038]-[0039] PLMN identifiers PLMN ID are also determined 201 in the USIM connected to the MS to be used in network selection),

means for comparing ([0006] comparison), in the terminal, the current network identifier identifying a target network of a current connection of the terminal and associated with the currently applied at least one connection setting to the stored network identifiers (PLMN ID stored in memory) associated with at least one other available connection settings ([0006] comparison of the received PLMN identifiers and PLMN identifiers stored in the terminal equipment, and [0042]) to select at least one connection setting associated with the same network identifier as the network identifier associated with the currently applied at least one connection setting ([0006] and [0042]) The mobile station performs 203 PLMN selection on the basis of a

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comparison of the received PLMN identifiers PLMN ID and the PLMN identifiers stored in the USIM)

carrying out a handover related function to continue providing access to the target network (fig.2: item 204, [0043] set up a connection 204 between the MS and the network element) via a new access point by using the selected at least one connection setting ([0043] If the selected network PLMN cannot be used for some reason, the network selection 203 can be carried out again as described above either automatically or manually, and a connection 204 can be set up to another UMTS network PLMN).

Regarding claim 20 is rejected with the same reasons set forth in claim 2.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4 and 11-12 are rejected under 35 U.S.C.103 (a) as being unpatentable over Haverinen et al. (U.S.Pub-20030119481), in view of Blatherwick et al. (U.S.Pat-6269395).

Regarding claim 3, Haverinen teaches the method according to claim 2,

Haverinen fails to specifically disclose at least one available connection setting associated with a different network identifier than the one associated with the at least one

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currently applied connection setting is dropped, and a handover algorithm is executed for the remaining connection settings.

However, Blatherwick teaches at least one available connection setting associated with a different network identifier than the one associated with the at least one currently applied connection setting is dropped (col.15, lines 41-57), and a handover algorithm is executed for the remaining connection settings (col.6, lines 39-54).

Therefore, it would have been obvious to one having ordinary in the art at the time the invention was made to apply the teaching of Blatherwick to Haverinen to allow the user to select services provided through different access points transparently and quickly.

Regarding claim 4 is rejected with the same reasons set forth in claim 3.

Regarding claim 11 is rejected with the same reasons set forth in claim 3.

Regarding claim 12 is rejected with the same reasons set forth in claim 3.

6. Claim 21 is rejected under 35 U.S.C.103 (a) as being unpatentable over Haverinen et al. (U.S.Pub-20030119481), in view of Lucidarme et al. (US 20030186678 A1).

Regarding claim 21, Haverinen teaches all the limitations of claim 9. Haverinen fails to specifically disclose wherein the terminal is a multimode mobile station.

However, Lucidarme teaches a multimode mobile station ([0051] (e.g. Mobile terminals held by subscribers of the PLMN (or of any other PLMN with which there are roaming

agreements) may, if they are multimode terminals, also communicate through the WLAN. A multimode terminal incorporates the communications protocols used in the cellular network, as well as those used in the WLAN)).

Therefore, it would have been obvious to one having ordinary in the art at the time the invention was made to apply the teaching of Lucidarme to Haverinen to allow the multimode mobile user to select services provided through different access points transparently and quickly.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahendra Patel whose telephone number is 571-270-7499. The examiner can normally be reached on 9:30 AM to 5:30 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, V. Paul Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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